

Linear Functions (Refer to pages 62-66)

Date _____

Name _____

Group # _____

1. Define linear function.

2. A linear function can be represented by a _____

3. Linear equations can be written in 3 forms.

a. The general standard form is _____

b. The general point-slope form is _____

c. The general slope-intercept form is _____

4. Write an example of an equation for each form.

a. Standard Form: _____

b. Point-Slope Form: _____

c. Slope-intercept Form: _____

5. Write each equation in slope-intercept form.

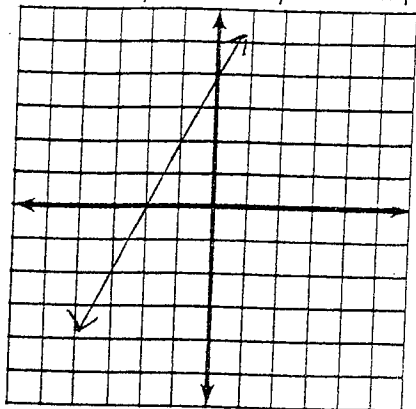
a. $2x + 3y = 18$

b. $x - 5y = -20$

6. a. Define x-intercept.

b. Define y-intercept.

c. Identify the x & y-intercepts. (State as ordered pairs.)



x-intercept: _____

y-intercept: _____

7. The formula for slope is _____

8. Solve Check Understanding on pages 64 & 66. Show all work!

a) Problem 3a

b) Problem 3b

c) Problem 6a

d) Problem 6c

9. Use the following words to complete the sentence: *parallel, perpendicular, positive, negative, zero, no slope.*

a. If a line is vertical, then the slope is _____

b. If a line rises to the right, then the slope is _____

c. If a line is horizontal, then the slope is _____

d. If a line rises to the left, then the slope is _____

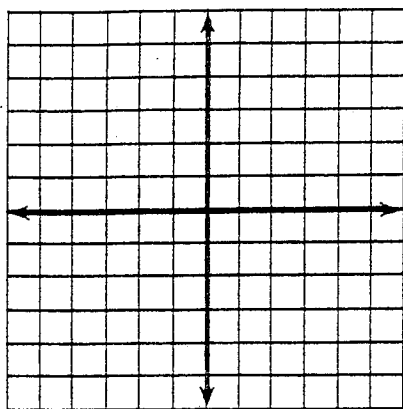
e. If the product of the slopes of two lines equals "-1", then the lines are _____

f. If two lines have the same slope, then the lines are _____

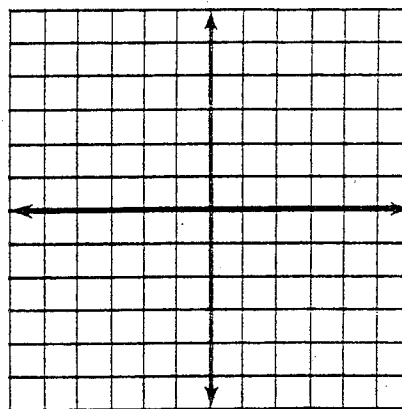
10. If a line has a slope of $\frac{2}{3}$, then the parallel slope is _____. The perpendicular slope is _____.
11. If a line has a slope of -6 , then the parallel slope is _____. The perpendicular slope is _____.
12. If $y = \frac{3}{4}x - 5$, the slope is _____ and the y-intercept is _____.

Graph each equation. (Use a straightedge.)

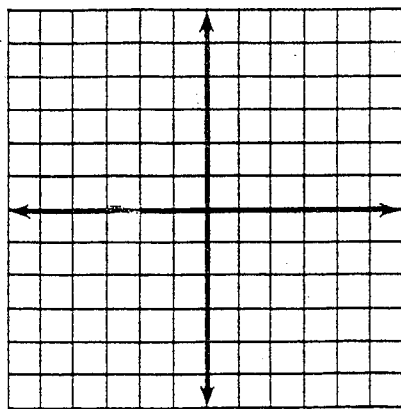
13. $y = \frac{3}{4}x - 5$



14. $y = -3x$



15. $y = 2$



16. $x = 4$

